Office Products Division Customer Engineering

Mr. & Mrs. Edsel Sanders 818 E. Fairfield Mesa, Arizona 85203

PICTORIAL REFERENCE/ADJUSTMENT MANUAL



Models C & D Typewriter

Form No. 241-5543-1 (Revised) January, 1971 Copyright[©] By International Business Machines Corporation 1971 Printed in U.S.A.

FORWARD

The purpose of this booklet is to provide you with a compact visual reference.

The adjustments have been divided into frames which are numbered in the proper adjustment sequence. The booklet should be used as follows:

Black numbers indicate proper adjustment sequence and frame identification.

Different levels are indicated in the same frame by level 1, level 2, etc., below the drawing.

Small red numbers at bottom of frame indicate adjustments out of sequence that are affected and should be checked.

Three vertical lines indicate end of an adjustment sequence.

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MODELS C AND D TYPEWRITER CYCLE INSPECTION PROCEDURE

Each inspection should include:

Note operator's comments Power clean

Clean rubber parts, card holders Lubrication

Functional check Electrical check

Clean covers

Cycle A - Applications, Alignment and Impression:

Drop and wipe type

Flush segment Lubricate fulcrum wire, typebar links

Service machine for its application or special function

Check and adjust alignment and impression

Cycle B - Adjustments and Parts Replacement:

Check all adjustments with power off Check for worn parts

Replace parts as necessary Exercise planned parts replacement, i.e., every two years

replace the power roll

Lubricate all points

MODELS C AND D TYPEWRITER FIVE POINT MACHINE CHECK

Carriage and Rails Levers (Operation - loose set screws)

Trucks (carriage movement) Feed rolls (binds - end play)

Racks (loose nuts and screws) Rear rail (loose screws)

Repositioning indicator and expand

Under Machines Cam clearance (all cams)

Decelerator cam arms (binds) Governor pinion (should have some backlash)

Functional Features

Tab (short and long) check set and clear

Shift (ensure that basket restores reliably - check lock) Spacebar (binds - "power off" check for escapement

Backspace/carriage return and tab/carriage return

Carriage return (unlatching point, tension) Backspace

(simultaneous) Margin set and release

tripl

Line lock

Escapement trip (typebar)

Ribbon

Tracking (characters on ribbon)

Guides (alignment)

Fabric rewind and reverse (check for backlash)

Typebar Operating (4-way simultaneous check)

Type strike-up and simultaneously check for:

Binding keylevers or keybuttons "Bottoming-out" and trip lever reset Catching of adjacent typebars or cam levers Alignment, impression and motion problems

MODELS C AND D TYPEWRITER LUBRICATION GUIDE

No. 10 Oil

All bearings and pivot points Motor bearings

Fulcrum wires

Cross-over bails at side frame pivot points.

No. 23 Grease

Decelerator clutch springs

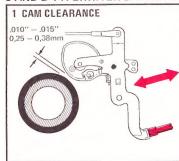
1/2 space camming lever surface Intermediate pulley Motor pulley teeth

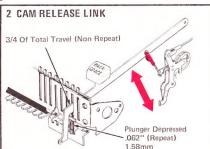
Motor shaft Shift toggle springs

Spacebar actuating lever - keylever contact point Knock-off finger channels

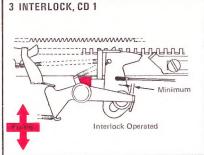
T-bar studs and roller Primary keylever cross-over bail hooks.

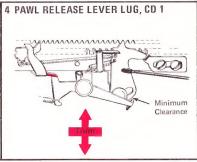
11. Auxiliary keylever cross-over bail hooks.

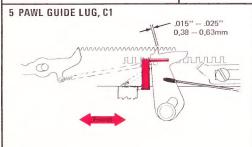


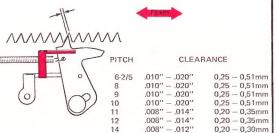


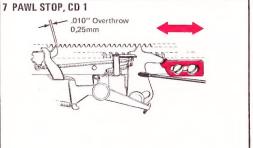
6 PAWL GUIDE LUG, D1

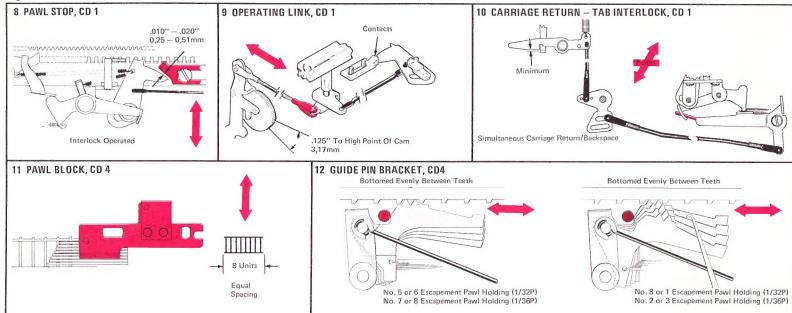


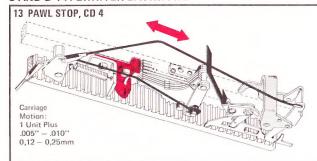


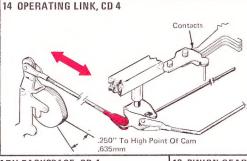


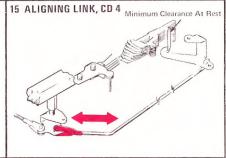


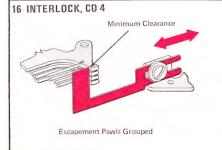


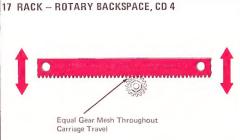


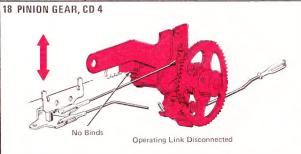


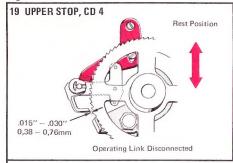


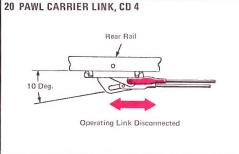


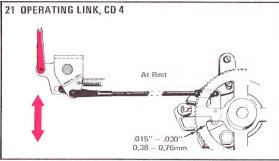


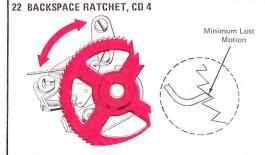


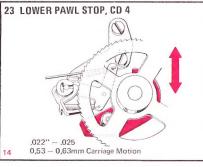


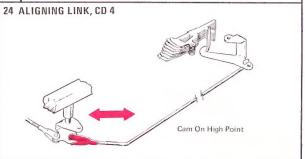




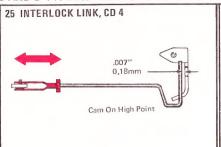


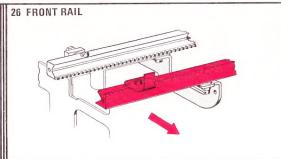


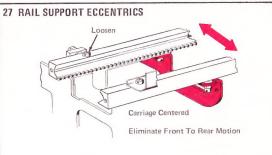


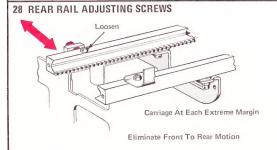


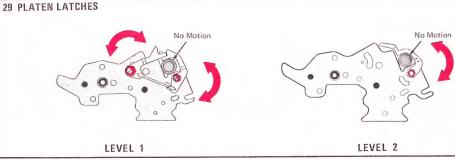
C AND D TYPEWRITER BACKSPACE AND CARRIAGE AND RAILS

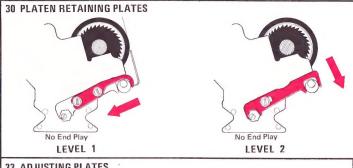




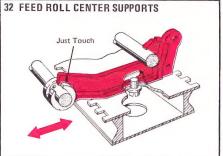


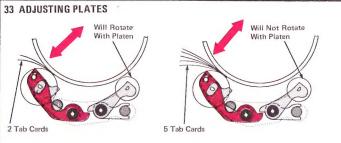




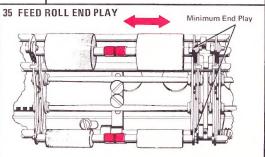




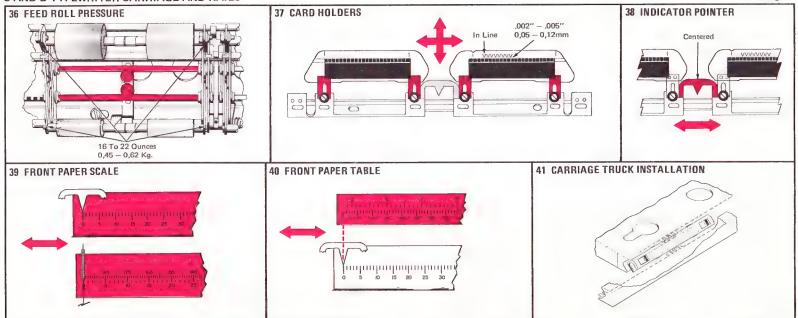


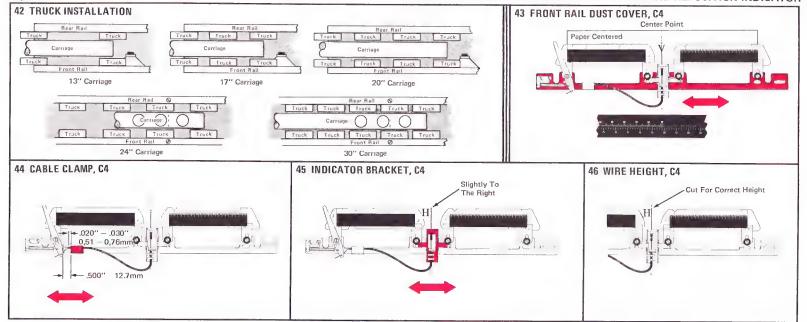


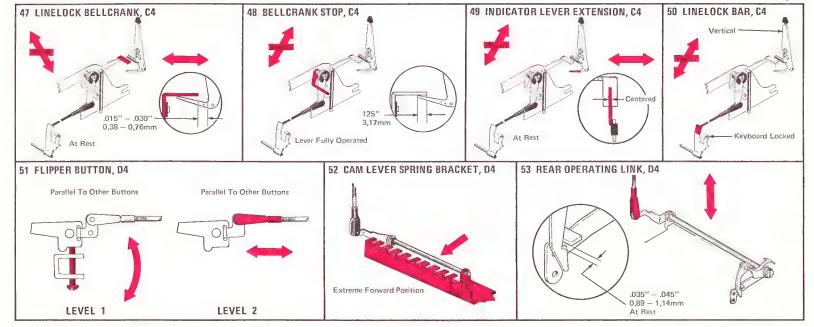


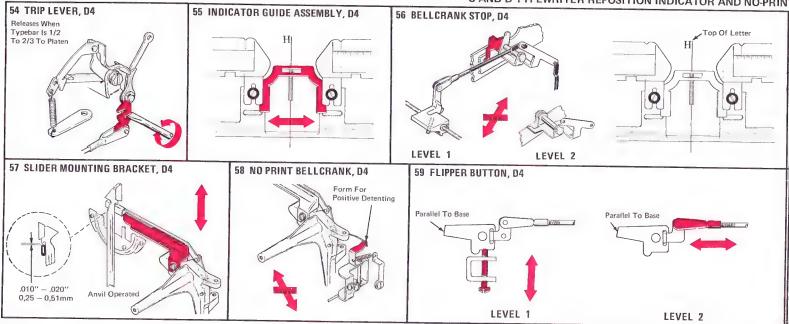


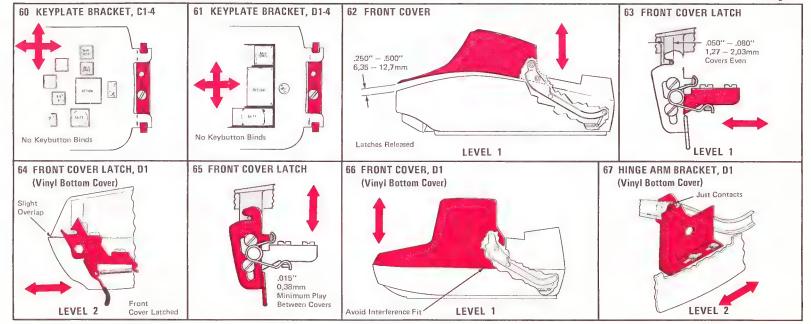
C AND D TYPEWRITER CARRIAGE AND RAILS

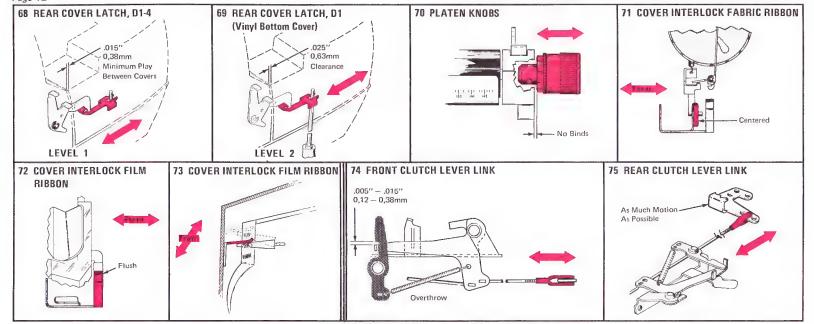


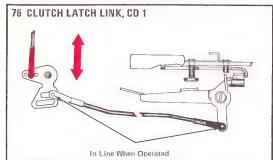


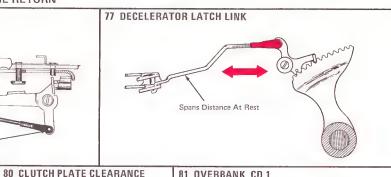


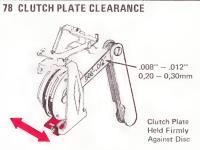




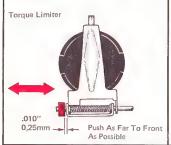


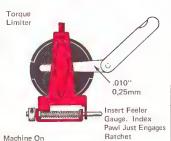


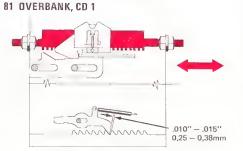


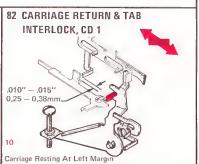


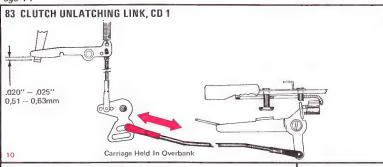


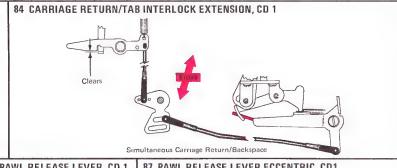














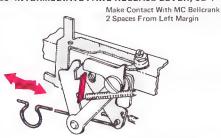


Line Space Lever In No. 3 Position Positive Return 1-1/2" (38,1mm) From LH Margin

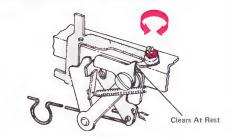


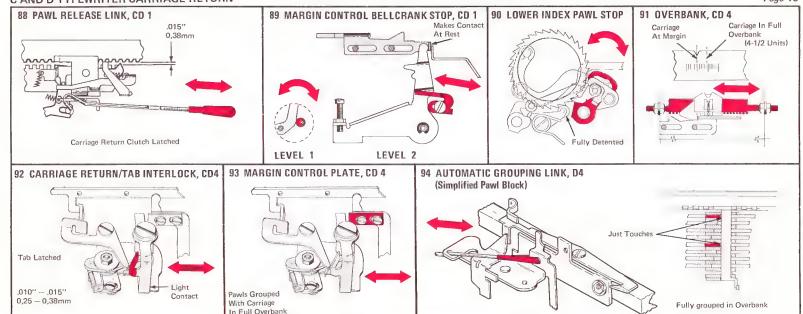
Line Space Lever In No. 3 Position Positive Return 1 Space From LH Margin

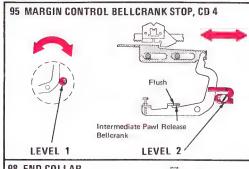
86 INTERMEDIATE PAWL RELEASE LEVER, CD 1

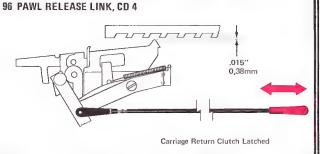


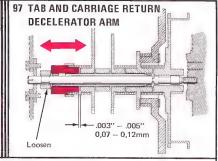
87 PAWL RELEASE LEVER ECCENTRIC, CD1

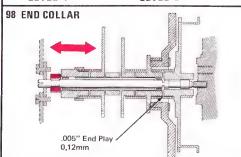


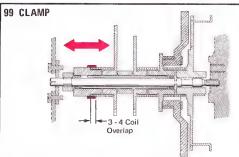


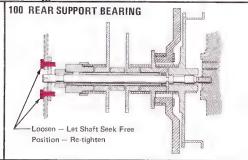












101 CARRIAGE TENSION

Carriage Pulled From Extreme Left To Right

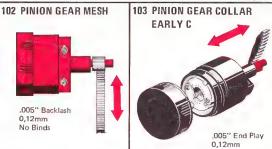
13" Carriage — 3 To 3-1/4 Lbs. At Start To 4-1/4 Lbs. Maximum 1,36 — 1,47Kg. 1,92Kg.

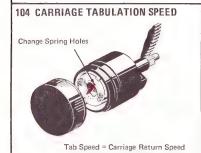
17" Carriage — 3 To 3-1/4 Lbs. At Start To 4-1/4 Lbs. Maximum 1.36 — 1.47 Kg. 1,92 Kg.

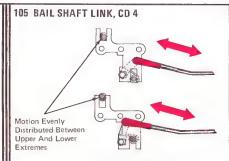
20" Carriage — 3-1/2 To 4 Lbs. At Start To 4-1/4 Lbs. Maximum 1,58 — 1,81 Kg. 1.92 Kg.

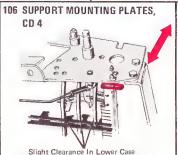
24" Carriage - 3-3/4 To 4-1/4 Lbs. At Start To 4-3/4 Lbs. Maximum 1,70 - 1.92 Kg. 2,43 Kg.

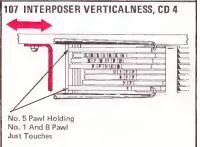
30" Carriage — 3-3/4 To 4-1/4 Lbs. At Start To 4-3/4 Lbs. Maximum 1.70 — 1.92 Kg. 2.43 Kg.

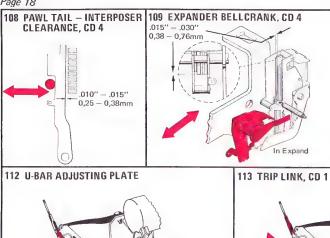




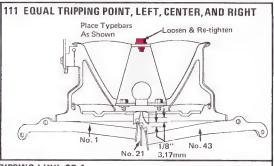


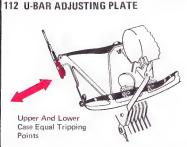


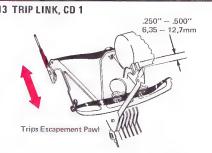


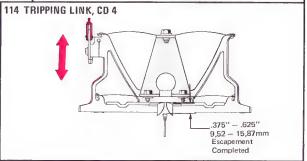


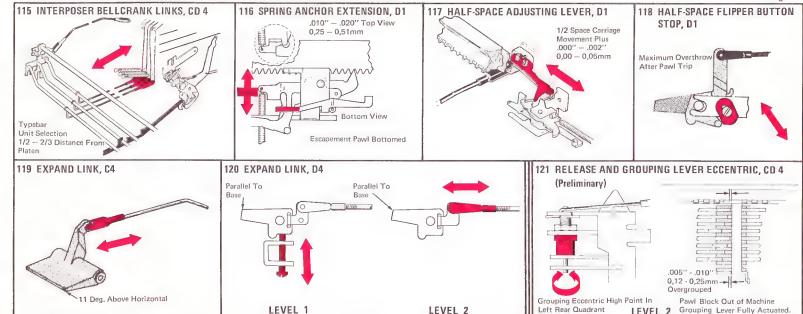


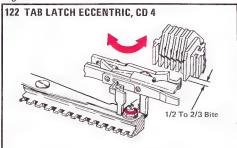


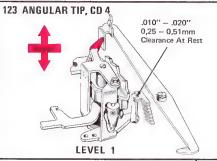


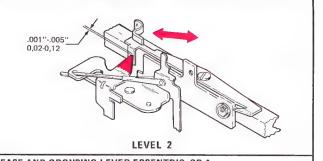


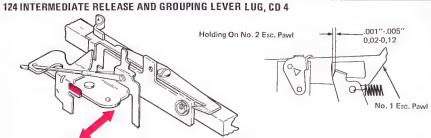




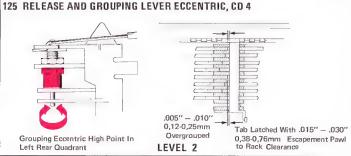


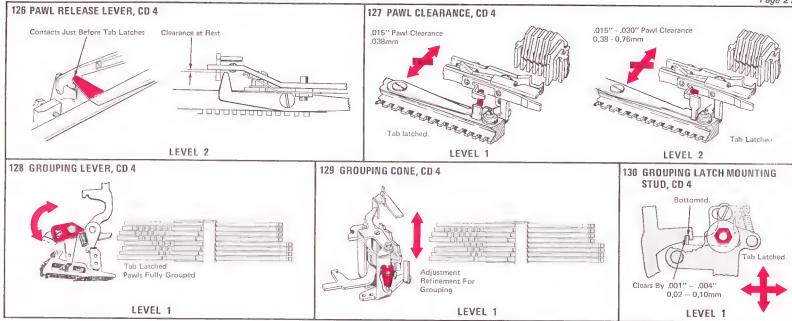






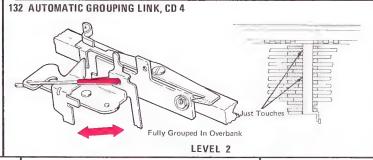
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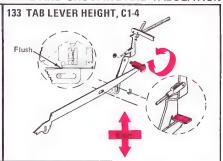




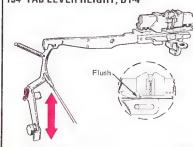


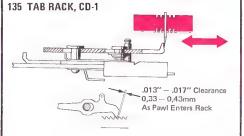


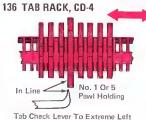


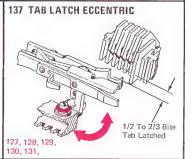


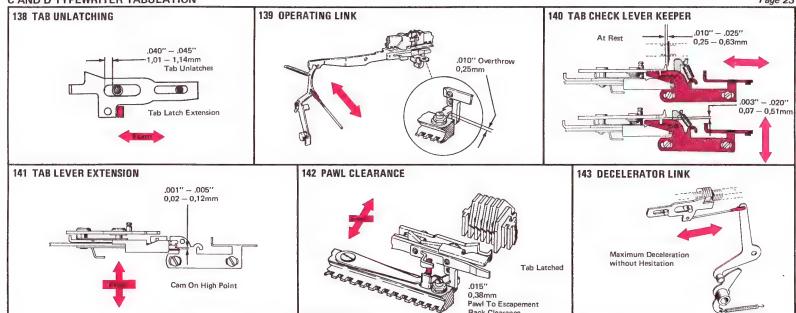
134 TAB LEVER HEIGHT, D1-4







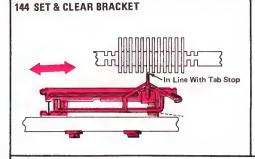


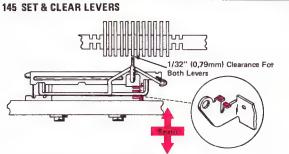


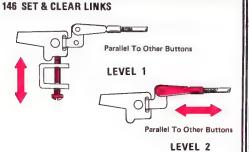
128, 129, 130, 131

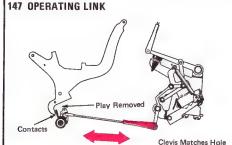
Rack Clearance

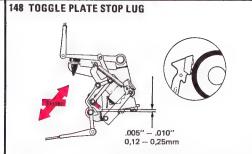
C AND D TYPEWRITER TABULATION AND RIBBON LIFT

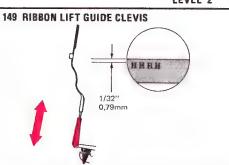




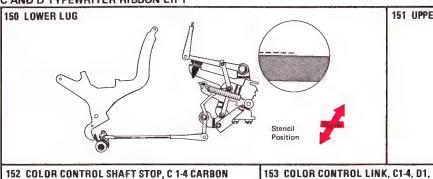


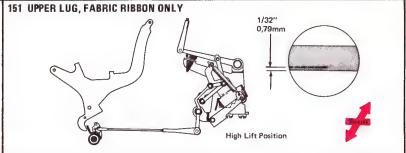




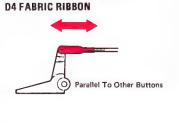


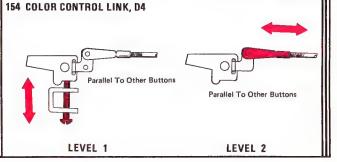
C AND D TYPEWRITER RIBBON LIFT

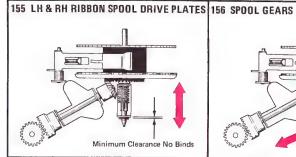


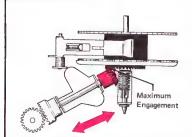


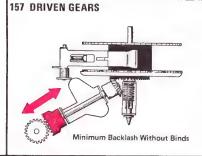


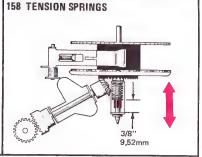


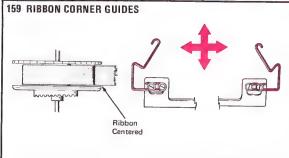


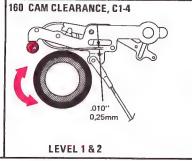


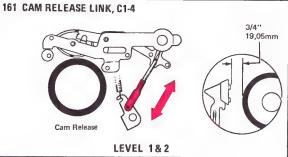




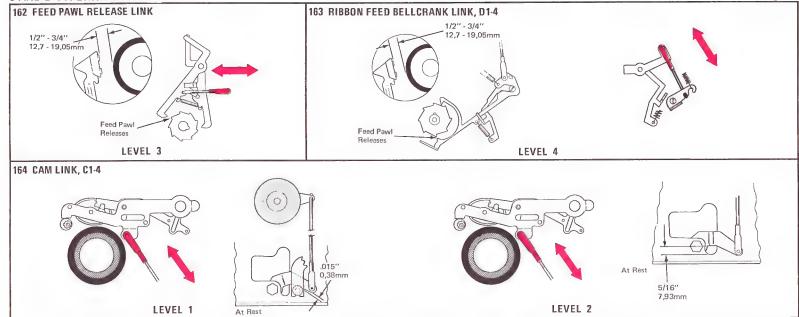


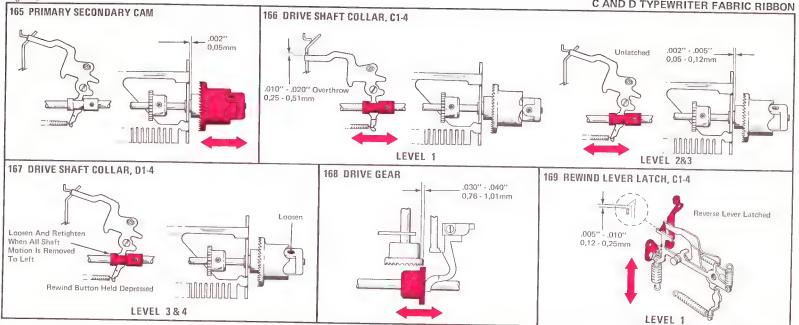






C AND D TYPEWRITER FABRIC RIBBON



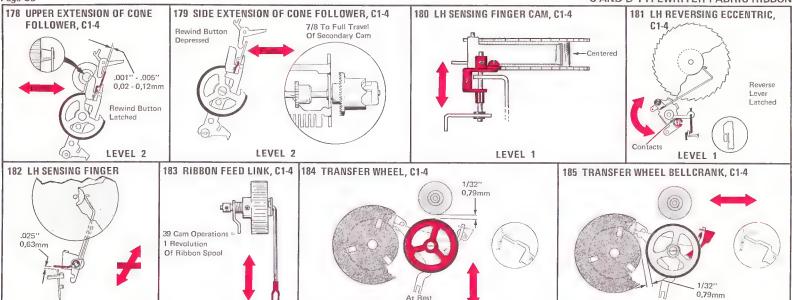


Page 29 C AND D TYPEWRITER FABRIC RIBBON 170 REVERSE LEVER ECCENTRIC STOP, C1-4 171 REVERSE LEVER STUD, C1-4 172 BUTTON LATCH LUG, C1-4 173 BUTTON LATCH, C1-4 Slight Movement .005" - .010" .006" Rotate Counter Clockwise 0,12 - 0,25mm 0,15mm Unlatched Overthrow Position Just Unlatches As Rewind Lever Latches Chillian LEVEL 1 LEVEL 1 LEVEL 2&3 LEVEL 1 176 RIGHT HAND SENSING CAM 177 CONE FOLLOWER, C1-4 175 REWIND LINK, D1-4 174 RAPID REWIND LINK .010" - .015" Rapid Rewind Button Latched 0.25 - 0,38mm Rapid Rewind Button Latched Play Removed .015" 0,38mm Bottomed .015" Minimum 0,38mm .015" 0.38mm LEVEL 3 LEVEL 4 LEVEL 2

LEVEL 2,3&4

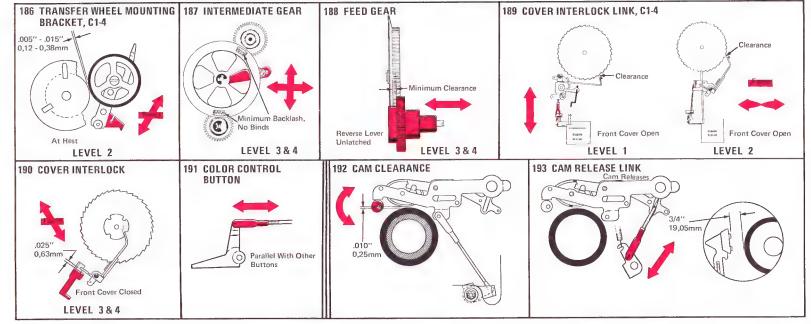
LEVEL 1&2

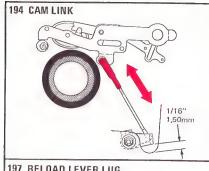
LEVEL 1

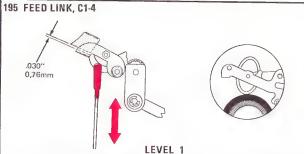


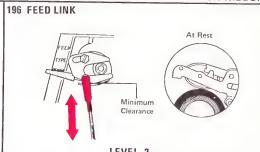
LEVEL 1

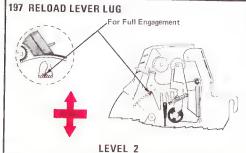
184

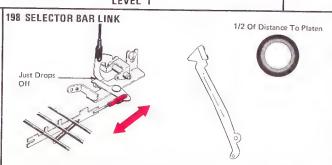




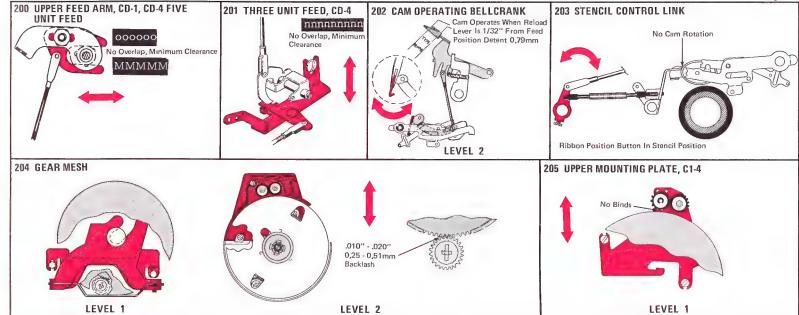


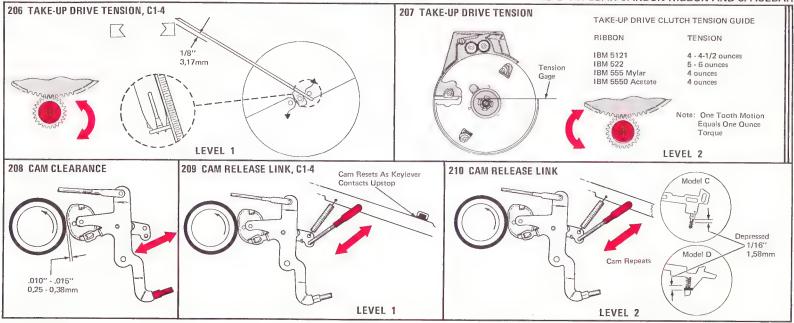




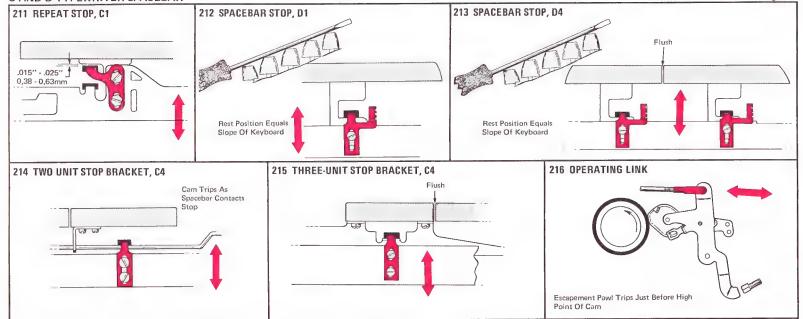


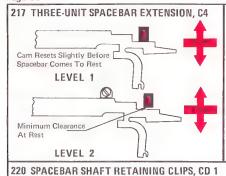


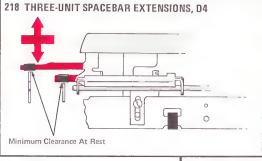


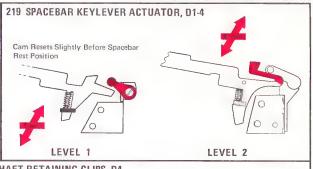


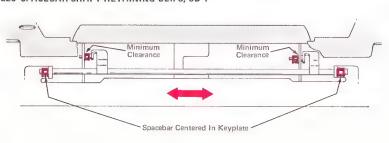
C AND D TYPEWRITER SPACEBAR

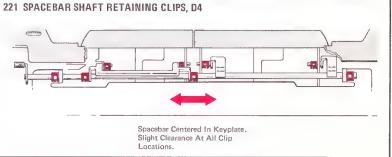




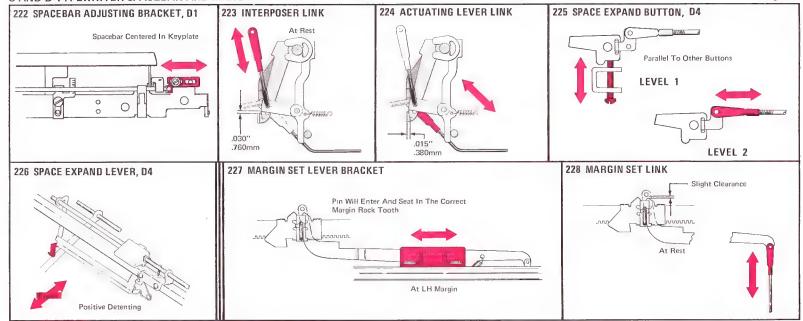


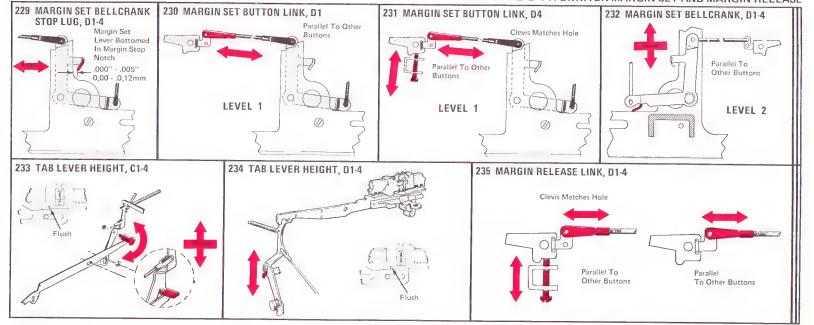


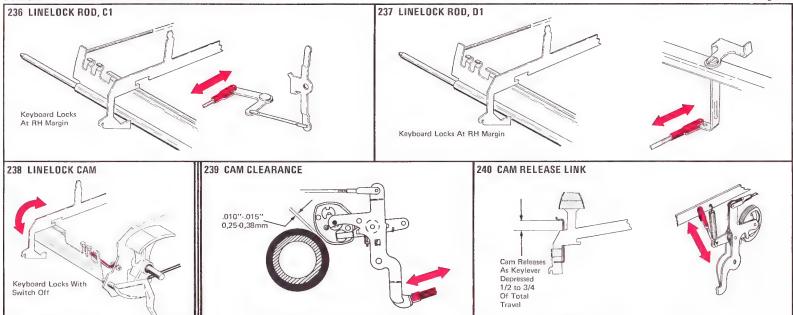


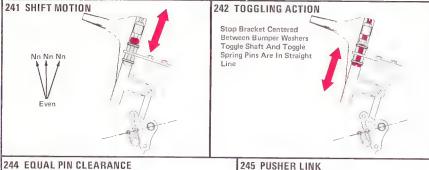


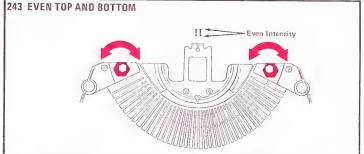
C AND D TYPEWRITER SPACEBAR AND MARGIN SET

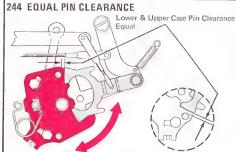


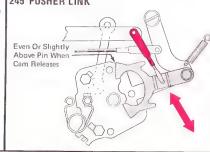


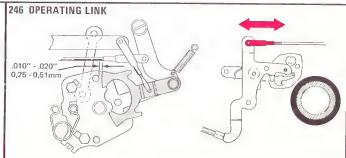




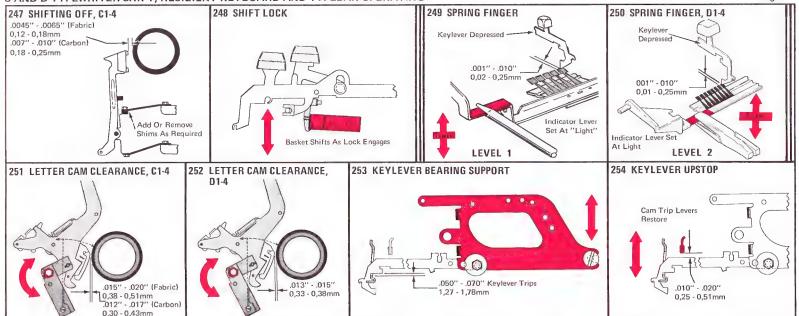


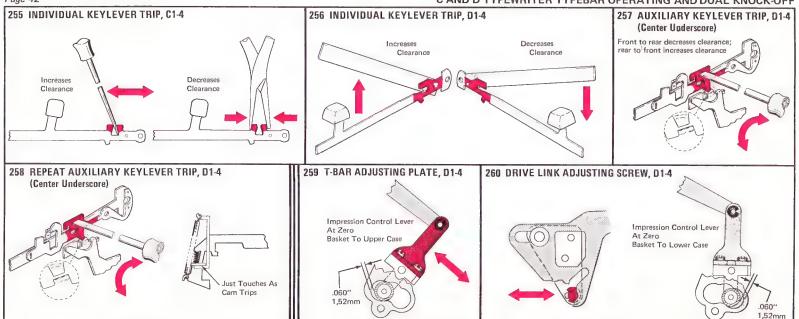


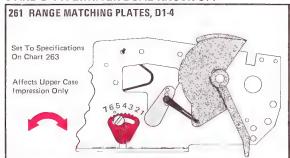




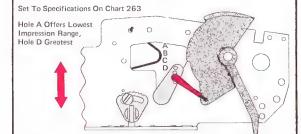
C AND D TYPEWRITER SHIFT, RESILIENT KEYBOARD AND TYPEBAR OPERATING





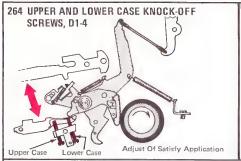


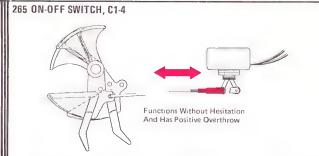
262 IMPRESSION CONTROL LINK, D1-4

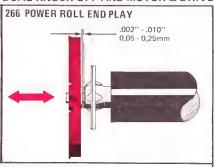


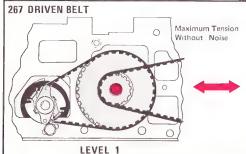
263 K. D. SPECIFICATIONS CHART

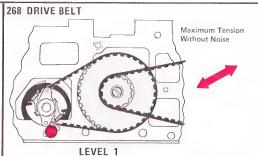
	Carbon R	Ribbon	Fabric R	Ribbon	"Motor Pulley	Pulley
	Imp. Con. Link Pos.	Range Match Ros	Imp. Con. Link Pos.	Range Match Pos.	Carbon	Fabric
Pec Control (SC) Pec		545888888888888888888888888888888888888	00000000000000000000000000000000000000		0.4 8 8 5 4 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	DE T P P P P P P P P P P P P P P P P P P
					• 14 = 9	95 ft/min

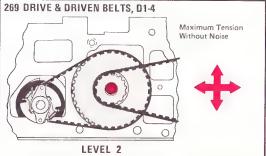




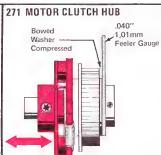


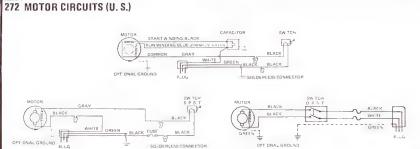


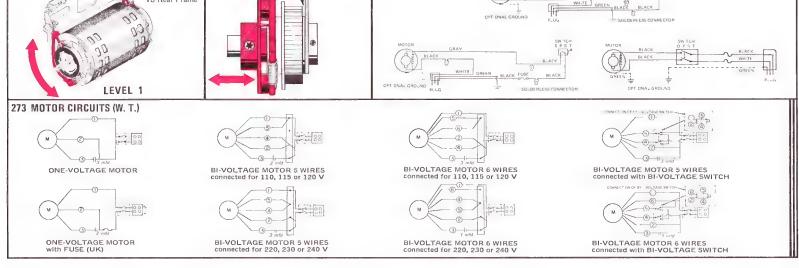




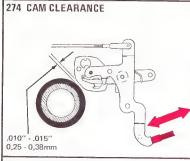
270 MOTOR MOUNTS Motor Parallel To Rear Frame

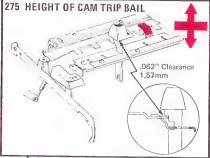






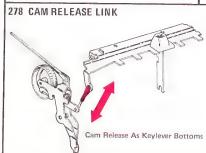
C AND D TYPEWRITER DECIMAL TAB

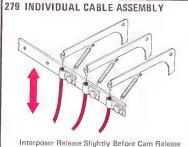






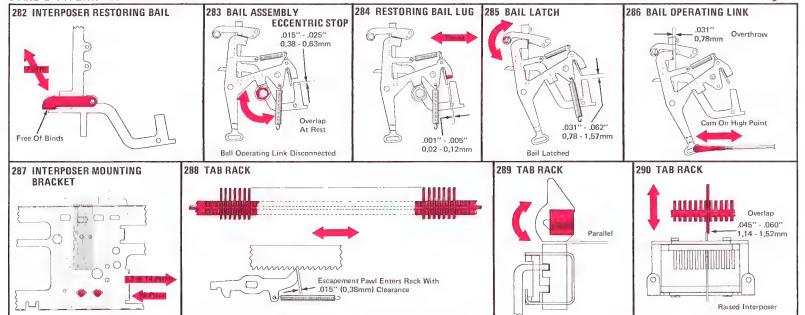


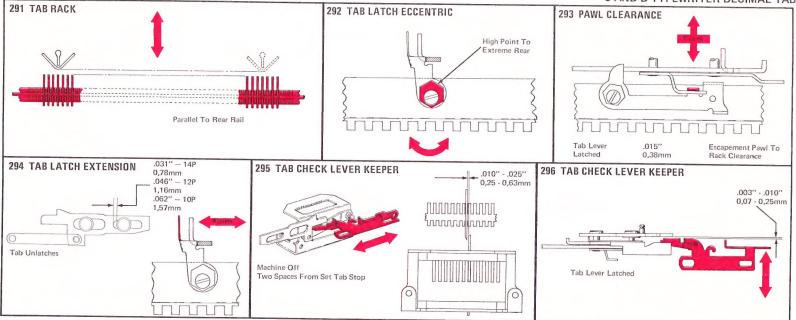






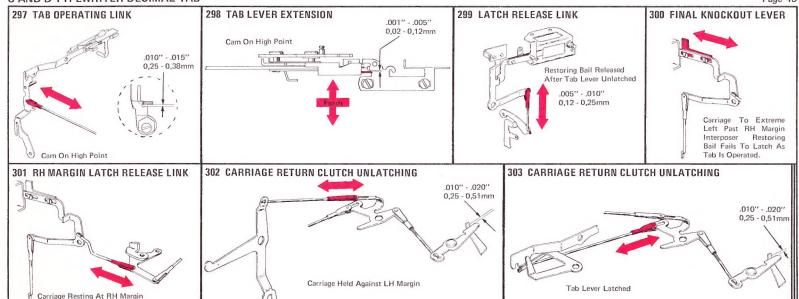






Interposer Restoring Bail Fails To

Latch



304 MACHINE IDENTIFICATION CODES

11 *84 Character Decima 12 88 Character 13 84 Character 14 88 Character 15 84 Character 16 88 Character 17 84 Character 17 84 Character 18 86 Character 18 88	*84 Character Keyboard without Partial Carr. Return, Declimal Tab or Electronic Tab 88 Character Keyboard without Partial Carr. Return, Decimal Tab or Electronic Tab 84 Character Keyboard with Partial Carr. Return 85 Character Keyboard with Partial Carr. Return 86 Character Keyboard with Decimal Tabulation
88 48 88 88 88 88 88 88 88 88 88 88 88 8	Keyboard without I Tab or Electronic T Keyboard with Partii Keyboard with Partii Keyboard with Decii
* * * * * * * * * * * * * * * * * * *	cter Keyboard with Partial Carr. Return cter Keyboard with Partial Carr. Return cter Keyboard with Decimal Tabulation
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* 88 88 88 88 88 88 88 88 88 88 88 88 88	Keyboard with
* * 88 88 88 88 88 88 88 88 88 88 88 88	
88 88 88 88 88 88 88 88 88 88 88 88 88	86 Character Keyboard without Decimal Tab
88 88 88 88 88 *84	Character Keyboard without Decimal Tab
*88 88 *84	86 Character Keyboard with Decimal Tab 88 Character Keyboard with Decimal Tab
* 88 * 88 *	
*84	EXECUTIVE Typewriters Character Keyboard with Carbon Ribbon and with
*84	other than 1/45 unit escapement
*84	Character Keyboard with Carbon Ribbon and with
40	other than 1/45 unit escapement
	1/45 unit proposed with Carbon Hibbon and with
1/4 44 88 Chara	1/45 unit escapement Character Keyboard with Carbon Ribbon and with
	1/45 unit escapement
45 *84 Chara	Character Keyboard with Fabric Ribbon and with
46 88 Chara	Character Keyboard with Fabric Ribbon and with
-	other,than 1/45 escapement
47 *84 Chara	Character Keyboard with Fabric Ribbon and with
1/4 48 88 Chara 1/4	1/45 unit escapement Character Keyboard with Fabric Ribbon and with 1/45 unit escapement
51 *84 Chara	FORMSWRITERS
	Decimal Tabulation
52 88 Chara	Character Keyboard without Partial Carr. Return or
	Decimal Tabulation 84 Character Keyboard with Partial Carr Beture
54 88 Character	oter Keyboard with Partial Carr. Return
84	
88	Keyboard with
	TOLL BILLER 86 Character Keyboard
58 88 Charac	88 Character Keyboard
	TUTUT - OUTPUT
32 88 Charac	84 Character Keyboard Model B 88 Character Keyboard Model B

All Model Carriage Lengths (3rd Digit)	Code	1 12" or 13" Carriage	2 16" or 17" Carriage	3 20" Carriage	4 24" Carriage	5 30" Carriage	All Mandal Disalt Course (Ast City)	All Wodel Files Codes (4th Digit)	Code	0 11 Pitch	1 12 Pitch	2 10 Pitch	3 9 Pitch	4 8 Pitch	5 62/5 Pitch	6 14 Pitch	7 1/45 Unit (Executive)	8 1/32 Unit (Executive)	9 1/36 Unit (Executive)	

TECHNICAL ASSISTANCE

Name	Phone No.	E
Tech. Specialist		-
Tech. Specialist		
Tech. Specialist		
Tech. Specialist		
District Technical Coordinator		-

Lexington Plant (working hrs.) EST/8:00 a.m. to 4:42 p.m.

Austin Plant (working hrs.) CST/8:00 a.m. to 4:42 p.m.